

IN THE CLAIMS:

Please amend claims 1 to 3 and 5 to 8 as follows:

1. (Amended) A method of producing a ceramic body having a construction such that cells are plugged alternately at both end faces of a ceramic honeycomb structural body by filling a plugging slurry into predetermined cells at both end faces of a ceramic honeycomb formed body, the method comprising the steps of:

AS
filling a plugging material that forms a mask into only the cells to be opened at one end face of the ceramic honeycomb formed body where the plugging material is filled;

immersing the end face, to which the plugging material that forms a mask is filled, into a plugging slurry; and

drying and sintering the ceramic honeycomb formed body while the plugging material that forms a mask is removed during a drying step or a sintering step.

2. (Amended) The method of producing a ceramic body according to claim 1, wherein the plugging material that forms a mask filling step further comprises the steps of:

preparing a suction jig having a same honeycomb construction as that of the ceramic honeycomb formed body;

adhering a mask, in which holes are arranged corresponding to the cells to be plugged with said plugging material, to one end face of the suction jig;

sucking paraffin balls, a diameter of which is larger than a length of one side of the cell, to said cells to be plugged with said plugging material at the other end face by sucking from the end face to which the mask is adhered;

setting the suction jig, to which paraffin balls are sucked, to the end face of the ceramic honeycomb formed body to which the plugging material is to be filled;

aligning the paraffin balls to the cells to be opened by stopping the sucking operation;

inserting the thus aligned paraffin balls into the cells by applying pressure; and

filling the paraffin balls into the cells to be opened as the plugging material that forms a mask.

3. (Amended) The method of producing a ceramic body according to claim 2, further comprising the steps of:

sucking the paraffin balls to the other end face by sucking from the one end face to which the paraffin balls are filled;

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inserting the thus sucked paraffin balls into the cells by applying a pressure; and

filling the paraffin balls into the cells to be opened of the other end face.

5. (Amended) The method of producing a ceramic body according to claim 1, wherein the plugging material that forms a mask filling step further comprises the steps of:

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making a mask for respective ceramic honeycomb formed bodies by piercing a sheet adhered to one end face of the ceramic honeycomb formed body at positions corresponding to the cells to be plugged;

immersing the one end face to which the mask is adhered into a liquid paraffin;

inserting the liquid paraffin into the cells through the holes of the mask by applying a pressure; and

filling the liquid paraffin into the cells to be opened as the plugging material that forms a mask.

6. (Amended) The method of producing a ceramic body according to claim 5, wherein the piercing step to the sheet adhered to one end face of the ceramic honeycomb formed body further comprises a step of:

dividing the cells of the end face into a plurality of small blocks; and

performing the piercing for respective small blocks one by one.

7. (Amended) The method of producing a ceramic body according to claim 1, wherein the plugging material that forms a mask filling step further comprises the steps of:

immersing one end face of the ceramic honeycomb formed body into a photo-curing resin before hardening;

emanating a light to the photo-curing resin from the other end face through a mask, in which a light is transmitted only to the cells to be opened, so as to harden the photo-curing resin; and

filling the photo-curing resin into the cells to be opened as the plugging material that forms a mask.

8. (Amended) The method of producing a ceramic body according to claim 7, wherein the plugging material that forms a mask filling step further comprises the steps of:

immersing the other end face of the ceramic honeycomb formed body into a photo-curing resin before hardening;

AC
emanating a light to the photo-curing resin from the one
end face through a mask, in which a light is transmitted only
to the cells to be opened, so as to harden the photo-curing
resin; and

filling the photo-curing resin into the cells to be
opened as the plugging material that forms a mask.
